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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/763,565	01/23/2004	Philippe Gambier	68.0418	4887

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EXAMINER

COLLINS, GIOVANNA M

ART UNIT	PAPER NUMBER
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3672

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/763,565

Applicant(s)

GAMBIER, PHILIPPE

Examiner

Giovanna M. Collins

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6, 9-19 and 22-30 is/are pending in the application.
- 4a) Of the above claim(s) 28-30 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-27 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6, 9-18, 22 and 24 is/are rejected.
- 7) ☐ Claim(s) 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Newly submitted claims 28-30 directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: These claims are directed to different species.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 28-30 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Objections

Claims 12-14 and 18 are objected to because of the following informalities:

Claims 12 and 13 recite the limitation " the support sleeve" in line 1. There is insufficient antecedent basis for this limitation in these claims, as this limitation has not been previously recited.

In claim 14, the phrase " sealing layer. and the wall" should be changed to - - sealing layer and the wall. - -.

Claim 18 recites the limitation " the energized seal element" in line 11. There is insufficient antecedent basis for this limitation in this claim, as this limitation has not been previously recited.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2,6 10-12 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Martin 7,244.

Referring to claims 1-2,6 and 10, Martin discloses a seal element for using in a packer comprising an energizing element (B) that is a spring comprising a metallic substrate adapted to store potential energy prior to the packer being run to a predetermined position in a well and a sealing layer (I) covering at least a portion of the energizing element; where the energizing element is adapted to release at least some of the potential energy at the predetermined position to radially expand the element and establish contact between the sealing layer and a wall of a wellbore encircling the packer.

Referring to claims 11-12, Martin discloses a support sleeve (b) comprising metal.

Referring to claim 18, Martin disclose a method comprising storing potential energy in a seal element of a packer before deploying the packer downhole; after the storing running the packer into the well; positioning the packer at a position at which a seal is to be formed an annulus of the well; setting the packer by releasing at least

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some of the potential energy to form a seal between the packer a wall surrounding the packer and maintaining the seal using at least some of the potential energy reaming in the potential energy stored in an energized seal element (see page 2, col. 2).

Referring to claim 19, Martin discloses the storing is performed by at deforming an elastic substrate (B) of the seal element.

2. Claims 1-2, 9 and 18-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Collins 5,904,354.

Referring to claims 1-2 and 9, Collins discloses (fig. 4a-4b) a seal element for using in a packer comprising an energizing element (18) that is a comprising a metallic substrate adapted to store potential energy prior to the packer being run to a predetermined position in a well and a sealing layer (24) covering at least a portion of the energizing element; where the energizing element is adapted to release at least some of the potential energy at the predetermined position to radially expand the element and establish contact between the sealing layer and a wall of a wellbore or an inner surface of a pipe (col. 1, lines 6-16) encircling the packer.

Referring to claim 18, Collins disclose a method comprising storing potential energy in a seal element of a packer before deploying the packer downhole; after the storing running the packer into the well; positioning the packer at a position at which a seal is to be formed an annulus of the well; setting the packer by releasing at least some of the potential energy to form a seal between the packer a wall surrounding the

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packer and maintaining the seal using at least some of the potential energy remaining in the potential energy stored in an energized seal element (col. 3, line 62-col. 4, line 18)).

Referring to claim 19, Collins discloses the storing is performed by at deforming an elastic substrate (18) of the seal element.

3. Claims 1,6, and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Fritsche 2,216,268.

Referring to claims 1,6 and 10, Fritsche discloses a seal element for using in a packer comprising an energizing element (13) that is a spring adapted to store potential energy prior to the packer being run to a predetermined position in a well and a sealing layer (12) covering at least a portion of the energizing element; where the energizing element is adapted to release at least some of the potential energy at the predetermined position to radially expand the element and establish contact between the sealing layer and a wall of a wellbore enclosing the packer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fritsche 2,216,268.

Fritsche discloses the element of claim 1 but does not disclose the material the energizing element comprises. However, the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Therefore it would be obvious to one of ordinary skill in the art at the time of the invention to modify the element disclosed by Fritsche to be a composite material because the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art.

5. Claims 14-17, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fritsche 2,216,268 in view of Stepp et al. 5,400,855.

Fritsche discloses an energized seal element for use in a packer deployed in a well comprising: an energizing element (13) having an interior surface and an exterior surface; sealing layer (12). Stepp (fig. 1c) teaches a support sleeve (56) for a sealing layer (54). Stepp teaches the sleeve helps to support and reinforce the sealing layer (col. 2, lines 54-59). As it would be advantageous to help support and reinforce the sealing layer, it would be obvious to one of ordinary skill in the art to modify the element disclosed by Fritsche to have a support sleeve as taught by Stepp.

Referring to claim 15, Fritsche, as modified, discloses the energizing element (13) uses stored potential energy to maintain a contact force.

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Referring to claim 16, Fritsche, as modified, discloses the energizing element (13) deforms elastically into a support sleeve to provide a radially outward force on the sealing layer (12).

Referring to claim 17, Fritsch discloses the sealing layer (12) is a thin layer of conformable material.

Referring to claim 22, Fritsch discloses a sealing layer (12) and a bow (13) adapted to remain retracted while the packer is run into a well and to press a sealing layer against a wall that encloses the packer to form a sealing contact between the sealing layer and the wall. Stepp (fig. 1c) teaches a support sleeve (56) for a sealing layer (54). Stepp teaches the sleeve helps to support and reinforce the sealing layer (col. 2, lines 54-59). As it would be advantageous to help support and reinforce the sealing layer, it would be obvious to one of ordinary skill in the art to modify the element disclosed by Fritsche to have a support sleeve as taught by Stepp.

Referring to claim 24, Fritsch discloses the bow is adapted to deform to store mechanical energy to keep the sealing layer in sealing contact with the wall.

6. Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins '354.

Referring to claim 19, Collins does not disclose a support sleeve embedded in the sealing layer. However, Collins discloses various items may be embedded in the seal to help further support the seal (col. 3, lines 51-61). As it would be advantageous to support the seal it would be obvious to one of ordinary skill in the art at the time of the

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invention to modify the element disclosed by Collins to have a support sleeve embedded in the sealing layer.

Allowable Subject Matter

Claims 25-27 are allowed.

Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

7. Applicant's arguments with respect to claims 1-3,6,9-19,22,24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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